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Information Cited by the Applicant(s) that may be Material
to the Prosecution of the Subject Application

Re: Application Serial No. 10/016,272

Applicants: Wayne D. Grover; John Doucette

Title: TOPOLOGICAL DESIGN OF SURVIVABLE MESH-BASED TRANSPORT
NETWORKS

Art Unit: 2681 *2666*

Examiner: Unknown

Filed: November 2, 2001

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United States Patent Documents

Examiner Initial ID	Document Number	Date	Name	Class	Sub Class
A1	5,850,505	12/15/98	Grover et al.	395	182.02
A2	6,377,543 B1	04/23/02	Grover et al.	370	227
A3	6,052,796	04/18/00	Croslin	714	4
A4	6,421,349 B1	07/16/02 (Corresponds to C3 listed below)	Grover	370	408
A5	6,404,734	06/11/02 (Corresponds to C5 listed below)	Stamatelakis	370	227
A6	2002/0071392	06/13/2002 (Corresponds to C11 listed below)	Grover et al.	370	241
A7	6,154,296	11/28/2000	Elahmadi et al.	259	119

Other Information

(Include author, title, date of publication to extent known, relevant pages, and place of publication if known)

Examiner Initial ID Document Identification

C1 A photocopy of Canadian Patent Application No. 2,161,847, filed October 31, 1995
(published May 1, 1997), including drawings and filing certificate, 32 pages.



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- C2 A photocopy of Canadian Patent Application No. 2,212,933, filed August 13, 1997 (published February 13, 1999), including drawings and filing certificate, 154 pages.
- C3 A photocopy of Canadian Patent Application No. 2,210,207, filed July 11, 1997 (published January 11, 1999), including drawings and filing certificate, 93 pages. (Corresponds to A4 listed above.)
- C4 A photocopy of Canadian Patent Application No. 2,269,649, filed April 22, 1999 (published October 22, 2000), including drawings and filing certificate, 21 pages. (Corresponds to C8 listed below.)
- C5 A photocopy of Canadian Patent Application No. 2,280,981, filed August 27, 1999 (published April 6, 2000), including drawings and filing certificate, 22 pages. (Corresponds to A5 listed above.)
- C6 A photocopy of Canadian Patent Application No. 2,285,101, filed October 6, 1999 (published April 8, 2000), including drawings and filing certificate, 38 pages. (Corresponds to C9 listed below.)
- C7 A photocopy of Canadian Patent Application No. 2,307,520, filed April 28, 2000 (published October 29, 2000), including drawings and filing certificate, 131 pages. (Corresponds to C10 listed below.)
- C8 A photocopy of U.S. Patent Application No. 09/314,518, filed May 19, 1999, including drawings and filing certificate, 21 pages. (Corresponds to C4 listed above.)
- C9 A photocopy of U.S. Patent Application No. 09/414,474, filed October 7, 1999, including drawings and filing certificate, 38 pages. (Corresponds to C6 listed above.)
- C10 A photocopy of U.S. Patent Application No. 09/561,355, filed April 28, 2000, including drawings and filing certificate, 125 pages. (Corresponds to C7 listed above.)



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- C11 A photocopy of Canadian Patent Application No. 2,359,168, filed October 16, 2001, including drawings and filing certificate, 51 pages. (Corresponds to A6 listed above.)
- C12 "Protection Cycles in Mesh WDM Networks", Ellinas, G, Hailemariam, A. G., Stern, T. E.; *IEEE Journal on Selected Areas in Communications*, Vol. 18, No. 10, October 2000.
- C13 "MENTOR: an algorithm for mesh network topological optimization and routing", G. Grover, A. Kershenbaum, P. Kermani, *IEEE Transaction on Communications*, Vol. 39, p. 503-513, 1991.
- C14 "Algorithms for the Spare Capacity Design of Mesh Resorable Networks", B. D. Venables, M.Sc. Thesis, University of Alberta, Edmonton, 1992.
- C15 "Optimal capacity placement for path restoration in STM and ATM mesh-survivable networks", R. R. Iraschko, M. H. MacGregor, W. D. Grover, *IEEE/ACM Transactions on Networking*, Vol. 6, No. 3, pp. 325-336, June 1998.
- C16 "Near optimal spare capacity planning in a mesh restorable network", W. D. Grover, T. D. Bilodeau, B. D. Venables, *IEEE Globecom '91*, pp. 2007-2012, 1991.
- C17 "A fast heuristic principle for spare capacity placement in mesh-restorable SONET/SDH transport networks", *Electronics Letters*, Vol. 33, No. 3, pp. 195-196, Jan. 30, 1997.
- C18 "Two strategies for spare capacity placement in mesh restorable networks", B. D. Venables, W. Grover, M. H. MacGregor, *Proceedings of the IEEE ICC '93*, Geneva, pp. 267-271, May 1993.
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C20 "A self-healing network with an economical spare-channel assignment", H. Sakauchi, Y. Nishimura, S. Hasegawa, *Proc. IEEE Globecom*, (1990) pp 438-443.

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C23 "A unified approach to network survivability for teletraffic networks: models, algorithms and analysis", D. Medhi, *IEEE Trans. on Communications*, vol.42, 1994, pp.534-548.

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C25 Y. Wang, *Modelling and solving single and multiple facility restoration problems*, Ph.D. dissertation, Sloan School of Management, MIT, June 1998., pp.32-33.

C26 W.D. Grover, "Distributed Restoration of the Transport Network", in *Network Management into the 21st Century*, editors T. Plevyak, S. Aidarous, IEEE / IEE Press co-publication, Chapter 11, pp. 337-417, Feb. 1994.

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C28 Y. Xiong; L.G. Mason, "Restoration strategies and spare capacity requirements in self-healing ATM networks" *IEEE/ACM Transactions on Networking*, Volume: 7 Issue: 1, Feb. 1999, pp. 98 -110.



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- pk* C30 Rainer R. Iraschko, "Path Restorable Networks", PhD Thesis, University of Alberta, chapter 4, pp. 56-85, Fall 1996.
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- pk* C32 I. Saniee, "Optimal Routing Designs in Self-Healing Communications Networks", *Bellcore, MRE 2D-362*, May 1994, 10 pages.
- pk* C33 "Introduction to SONET Networking", NORTEL tutorial handbook, Oct. 30, 1996.
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- pk* C36 W.D. Grover, "Network Survivability: A Crucial Issue for the Information Society", IEEE Canadian Review, No. 27, Summer 1997, pages 16 – 21.
- pk* C37 W.D. Grover, D. Stamatelakis, "Cycle-Oriented Distributed Preconfiguration: Ring-like Speed with Mesh-like Capacity for Self-planning Network Restoration.", Proceedings of IEEE ICC 1998, 7 pages.



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[Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant]